

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Piedmont Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Georgia-Pacific Wood Products LLC
Emporia Plywood Facility
634 Davis Street, Emporia, Virginia
Permit No. PRO50283

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Georgia-Pacific Wood Products LLC has applied for a Title V Operating Permit for its Emporia Plywood facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: _____ Date: _____

Air Permit Manager: _____ Date: _____

Deputy Regional Director: _____ Date: _____

FACILITY INFORMATION

Permittee/Facility

Georgia-Pacific Wood Products LLC – Emporia Plywood
634 Davis Street
Emporia, Virginia 23847

County-Plant Identification Number: 51-081-0020

SOURCE DESCRIPTION

NAICS 321212 – Softwood Plywood Manufacturing
SIC 2436 – Softwood Plywood Manufacturing

The facility is operated by Georgia-Pacific Corporation, and manufactures 3/8" softwood plywood. Logs are received in the Log Yard and taken to the Cut-Up where they go through debarking and are cut to usable lengths before being soaked in vats of hot water to loosen the fibers for peeling. Veneer is cut from the logs in the "Green End", and any residuals are chipped for use in the steam boiler or for shipment off-site.

After the veneer is sorted and clipped, it is dried in one of three veneer dryers, glued, and pressed. The plywood boards are then cooled and transported to the Plywood Trim Panel Saw to trim the edges. Sawdust generated from this process is collected in a vacuum system located above each saw, and transported to the Central Dry Waste System.

The facility is a Title V major source. This source is located in an attainment area for all pollutants, and is also a PSD major source, due to permitted emissions from its wood-fired boiler and dryers. The wood-fired boiler was originally permitted under a permit issued on **November 11, 1977** and the veneer dryer No. 1 was originally permitted under a permit issued on November 9, 1978. Since then, these permits and the Title V permit have been amended as follows: (current permits in **bold**)

- August 21, 1996 – Boiler permit amended to allow burning of waste oil and other materials, but was rescinded.
- August 25, 1997 – Dryer permit amended to increase the hourly and annual veneer throughput.
- May 3, 2003 – Dryer permit amended to construct and operate a veneer conditioning chamber (Ref. No. VCC). This permit also permitted two existing dryers No. 2 and 3 and three existing presses (No. 1, 2 and 3) to avoid PSD.
- June 3, 2003 – Dryer permit administratively amended (typos).
- June 18, 2003 – Title V issued.
- March 30, 2005 – Dryer permit amended to install a RTO to meet MACT, Subpart DDDD requirements.
- July 6, 2005 – Title V amended to update it with the most current NSR permits.
- July 21, 2006 – Dryer permit amended to install the thermal catalytic oxidizer to meet MACT Subpart DDDD requirements (RTO was never installed because of rising energy processes).
- August 30, 2006 – Dryer permit administratively amended to change the MACT compliance date.
- **September 8, 2006** – Dryer permit amended to construct and operated the Moisture Sealant Surface Coating Line (Ref. No. SC-1).

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

[illegible]

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Veneer Conditioning Chamber							
VCC	EP16	Veneer Conditioning Chamber	2,652 ft ² /hr 3/8" Basis	--	--	--	9/8/2006
Plywood Presses							
P1 P2 P3	EP9	Williams-White Plywood Presses	62,030 ft ² /hr 3/8" Basis each	--	--	--	9/8/2006
Specialty Lines							
CTL	EP6	Dry Waste Transfer System	1.5 tons/hr	- Peerless Division cyclone - Carter Day baghouse	C6 BH2	PM, PM ₁₀	--
SDR	EP7	Sander (Finishing)	58,237 ft ² /hr	- Cyclone - Carter Day baghouse	C5 BH1	PM, PM ₁₀	--
SC-1	Fugitive	Moisture Sealant Surface Coating Line	58,000 ft ² /hr	--	--	--	9/8/2006
Storage of Wood Residuals							
CTLB	Fugitive	Central Truck Loading Bin	1.5 tons/hr	--	--	--	--

EMISSIONS INVENTORY

Emissions from the 2006 calendar year are summarized in the following tables.

2006 Actual Emissions

2006 Criteria Pollutant Emission in Tons/Year					
Emission Unit	VOC	CO	SO ₂	PM ₁₀	NO _x
Wood-Fired Boiler (WWB)	24.2	372.3	15.5	61.8	136.5
Veneer Dryers (VD1, VD2, VD3)	144.1	11.1	--	64.2	--
Veneer Dryers Cooling Sections (VD1-C, VD2-C, and VD3-C)	7.8	6.7	--	--	--
Woodworking	--	--	--	27.0	--
Veneer Conditioning Chamber	0.85	--	--	0.04	--
Plywood Presses (P1, P2, P3)	23.3	--	--	3.9	--
Moisture Sealant Coating Line (SC-1)	0.0	--	--	--	--
Total:	200.3	390.1	15.5	156.9	136.5

Pollutant	Actual Hazardous Air Pollutant Emissions in 2006 in Tons/Year
Acetaldehyde	4.94
Acrolein	3.22
Benzene	2.93
Chlorine	0.49
Formaldehyde	6.35
Hydrochloric Acid	11.79
Manganese Compounds	0.99
Methanol	15.32
Methyl Isobutyl Ketone (MIK)	8.63
Phenol	2.54
Propionaldehyde	1.01
Styrene	1.18
Toluene	1.36
Xylenes	1.17

Total HAPs: 61.92 tons/yr

EMISSION UNIT APPLICABLE REQUIREMENTS – Wood-fired Boiler (Ref. No. WWB)

There are two sources of specific applicable requirements for the wood-fired boiler: The 11/28/77 major NSR permit and Chapter 50 for new sources.

The boiler was installed prior to the affected facility date of NSPS, Subpart Db, and therefore does not have Db as an applicable requirement.

A. Limitations

11/28/77 major NSR permit:

1. Particulate emissions from the wood-fired boiler (EU ID# WWB) shall be controlled by the use of a multicyclone collector followed by a scrubber. The multicyclone collector and scrubber shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-80-1180, and the 11/28/77 Permit)
2. The approved fuel for the wood-fired boiler is wood waste. "Wood waste" is defined as wood feed stock, bark, resinated and unresinated sawdust, sanderdust, dry waste, board trimmings, and other wood wastes capable of being hogged. This definition does not include wood contaminated with paints, plastics, finishing material, other foreign materials which might emit toxic air pollutants when burned, or other chemical treatments, except the wood waste may contain small quantities of equipment washdown oil, oil-contaminated spill cleanup material, process resins, glue solids, waxes, and edge sealers generated at the facility. The woodwaste may also contain small quantities of fuel oil for use during boiler startup. A change in fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 5 of 11/28/77 Permit)
3. Emissions from the operation of the wood-fired boiler shall not exceed the limits specified below:

Particulate Matter	27.0 lbs/hr	117.3 tons/yr
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(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 2 of 11/28/77 Permit)

Chapter 50:

4. Visible emissions (excluding condensed water vapor/steam) from the wood-fired boiler stack shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-50-80 and 9 VAC 5-80-110)

****Note (from original Title V):** The permittee requested that soot blowing and grate cleaning be exempted from the opacity standard. However, a visible emissions evaluation conducted by DEQ staff on 8/22/02 showed no excess visible emissions during the soot blowing and grate cleaning procedure, and relief from the standard does not appear to be available under current regulations.

Title V Conditions:

5. The wood-fired boiler shall consume no more than 173,800 tons of wood waste per year, calculated as the sum of each consecutive twelve (12) month period.
(9 VAC 5-80-110)

****Note:** *The following permit condition was added to the Title V permit for enforceability.*

6. Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.
(9 VAC 5-80-110)

****Note:** *It is the practice of the Virginia Department of Environmental Quality to require in permits conditions that the emission sources, such as fuel burning equipment, be operated in a proper manner. The proper operation stipulation has been added to the federal operating permit for completeness.*

B. Monitoring

Title V Conditions (Periodic Monitoring Requirements):

1. An annual internal inspection shall be conducted on the multicyclone by the permittee to insure structural integrity.
(9 VAC 5-80-110)
2. The permittee shall install differential pressure monitoring equipment on the multicyclone and measure and record a baseline differential during the stack test required by Condition III.D.2, while the boiler is demonstrating compliance with the limit contained in Condition III.A.4. The differential pressure shall be monitored and recorded on a weekly basis. If the differential pressure deviates more than 20% below baseline differential pressure, the permittee shall perform an inspection of the multicyclone to determine the cause of the abnormal condition, and take steps to correct it.
(9 VAC 5-80-110, 9 VAC 5-80-1180, and 9 VAC 5-50-260)
3. The scrubber (PCD ID# B2) shall be equipped with a flow meter. The permittee shall measure and record a baseline flow during the stack test required by Condition III.D.2., while the boiler is demonstrating compliance with the limit contained in Condition III.A.4. If the flow deviates more than 20% below the baseline flow rate, the permittee shall perform an inspection of the scrubber to determine the cause of the abnormal condition, and take steps to correct it.
(9 VAC 5-80-110)
4. The wood-fired boiler stack shall be observed visually at least once each calendar week to determine if its emissions, excluding condensed water vapor/steam, are normal. Each unit observed having apparent abnormal visible emissions shall be followed up with a 40 CFR Appendix A Method 9 visible emissions evaluation unless the apparent abnormal condition is corrected as expeditiously as possible and recorded, and the apparent abnormal condition, its cause, and the corrective action measures taken are recorded. When conditions prevent taking opacity readings using 40 CFR 60 Appendix A Method 9, the permittee shall note the cause(s), such as: inclement weather conditions, steam plume interference, plume intermingling, and sun angle exceedance, and shall perform the Method 9 evaluation as soon as conditions permit.

(9 VAC 5-80-110 and 9 VAC 5-50-20)

5. The permittee shall use appropriate emission factors and throughput data to verify, on a monthly basis, that the hourly and annual (12-month) emission limits for particulate matter are not exceeded.
(9 VAC 5-80-110)

CAM Requirements

A Compliance Assurance Monitoring (CAM) Plan for PM was included in the application for the facility according to 40 CFR 64.2. This was due to the fact that the wood-fired boiler (EU ID# WWB) is controlled by a scrubber as a means to control PM emissions, is subject to an emission limitation, and has uncontrolled PM emissions that are above major source thresholds. The permittee shall monitor, operate, calibrate and maintain the scrubber controlling the wood-fired boiler according to the following:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
<ul style="list-style-type: none">Continuously monitor the make-up water flow rate.Records shall be collected by a Data Acquisition System (DAS) or strip chart.	<ul style="list-style-type: none">Scrubber flow meter shall be calibrated at least annually based on manufacturer specifications.	<ul style="list-style-type: none">Tested indicator for the make-up water flow rate: The baseline flow established during the stack test required by Condition III.D.2.Excursion: If the flow deviates more than 20% below the baseline flow rate for the 3-hour block period.Data points shall be collected every 15 minutes, averaged over a 3-hour block period.

All boilerplate CAM conditions were placed in the Title V permit and listed below:

6. **Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-110 E and 40 CFR 64.6 (c))
7. **Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9 VAC 5-80-110 E and 40 CFR 64.7 (b))
8. **Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the wood-fired boiler is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a

minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-110 E and 40 CFR 64.7 (c))

9. **Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the wood-fired boiler (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))
10. **Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))
11. **Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Piedmont Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-110 E and 40 CFR 64.7(e))
12. **Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the wood-fired boiler for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
 - a. Improved preventative maintenance practices;
 - b. Process operation changes;

- c. Appropriate improvements to control methods;
- d. Other steps appropriate to correct control performance; and
- e. More frequent or improved monitoring
(9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

There is no CAM plan associated with the multicyclone collector. The multicyclone collector is not a "control device" but is considered "inherent process equipment" (or "recovery equipment"). Inherent process equipment is defined in 40 CFR 64.1 as, "Equipment that is necessary for the proper or safe functioning of the process, or material recovery equipment that the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulations. For the purposes of this part, inherent process equipment is not considered a control device." To see whether the facility's multicyclone collector was indeed inherent process equipment, specific questions were asked to the facility. These questions came from the Title V Manual, Appendix X – CAM, Attachment B, *Control device or Inherent process equipment determination - Recovery equipment*. The main question is stated below:

1. What is the value of the material recovered annually compared to the annualized cost of the control equipment (purchase, maintenance, and operation)?
 - The value of the material recovered annually = \$61,175
 - The annualized cost of the control equipment (purchase, maintenance, and operation) = \$2,000

TOTAL = \$2,000 < \$61,175

****If the value of the material recovered annually is more than the annualized cost of the equipment, the equipment is not control equipment. This stops all other questions.**

After this question, it was noted that the equipment is inherent process equipment and is not control devices. (see email dated February 4, 2008 from Robert Bullock)

C. Recordkeeping

Title V Conditions:

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
 - Tons of wood waste combusted in the wood-fired boiler on a monthly and annual basis. Tons per year consumption is calculated as the sum of each consecutive 12-month period.
 - Calculation of hourly and annual emissions of particulate matter (PM). Annual emissions shall be calculated as the sum of each consecutive 12-month period.
 - Differential pressure readings across the wood-fired boiler multicyclone and results of

multicyclone inspections.

- Flow readings across the scrubber and scrubber maintenance records.
- Results of visible emissions observations, any subsequent Method 9 visible emission evaluations, the cause of any abnormal and excess visible emissions, corrective measures taken to correct the excess visible emissions, and records of conditions which prevent Method 9 visible emission evaluations in the event of an apparently abnormal visible emission condition.
- Results of any emissions testing.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

2. The permittee shall maintain records of the required training including a statement of time, place and nature training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boilers. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
(9 VAC 5-80-110)
3. **Compliance Assurance Monitoring (CAM) Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
(9 VAC 5-80-110 E and 40 CFR 64.9(b))

D. Testing

Title V Conditions:

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 and 9 VAC 5-80-110)
2. The permittee shall perform a Method 5 stack test on the Erie City boiler (WWB) stack within 180 days of the issuance of this permit.
(9 VAC 5-80-110 K)
3. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

E. Reporting

Title V Conditions:

1. The permittee shall report the results of any 40 CFR Part 60, Appendix A Method 9 visible emissions evaluation performed in accordance with Condition III.B.4. If the test indicates that the boiler is out of compliance with the opacity standard, the source shall also report the length of time associated with any exceedance of the standard and the corrective action taken to correct the exceedance. This report shall be sent to the Director, Piedmont Regional Office.
(9 VAC 50-50-50 and 9 VAC 5-80-110 E)
2. The results of the stack tests required by Condition III.D.2 shall be submitted to the Director, Piedmont Region within 45 days from the date the tests are conducted.
(9 VAC 5-80-110)
3. The permittee shall submit reports semi-annually to the Director, Piedmont Regional Office of the following:
 - a. Instances when the device used to measure differential pressure across the multicyclone is more than 20% below normal range and any corrective action taken;
 - b. Instances when the device used to measure flow across the scrubber is more than 20% below normal range and any corrective action taken;
 - c. Any month during which the calculated annual emissions from the boiler exceed the standard listed in Condition III.A.4.
(9 VAC 5-80-110 B)
4. The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition C.3 of this permit to the Director, Piedmont Regional Office. Such reports shall include at a minimum:
 - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.
(9 VAC 5-80-110 F and 40 CFR 64.9(a))

F. Streamlined Requirements

None.

EMISSION UNIT APPLICABLE REQUIREMENTS – Cut-Up and Green End (EU ID# DB1, DB2, and CS); Dry Waste Transfer System (EU ID# CTL); Specialty Lines Sander (EU ID# SDR); Central Truck Loading Bin (EU ID# CTLB)

The equipment located in the Cut-Up and Green End (EU ID #DB1, DB2, and CS) consists of existing equipment that does not have any permit-related applicable requirements. Although DB2 was installed as a replacement in 1979, and DB1 was installed, also as a replacement, in 1987, there was no debottlenecking or net increase in emissions above PSD significance levels as a result of either installation, and the equipment installations were not subject to permitting. The only requirements placed upon the process by the Title V permit are the existing source visible emissions limits (Rule 4-1) and the emission limits from Rule 4-4. The grain loading requirements of Rule 4-17 (*Emission Standards for Woodworking Operations*) have been incorporated for the chip screen.

There are currently no permit limits on the Dry Waste Transfer System (EU ID# CTL) and the Specialty Lines Sander (EU ID# SDR). They were both installed prior to the effective date of the regulations. Only the existing source opacity limits (Rule 4-1), Process Weight Rule (Rule 4-4) limits, and the grain-loading limits of Rule 4-17 are applicable. The particulate limits are much higher than the potential emissions; therefore, only the grain-loading limit is included in the Title V permit.

A. Limitations

Existing Source Regulations for Opacity (Rule 4-1):

1. Visible emissions (excluding condensed water vapor/steam) from the Cut-Up and Green End (EU ID# DB1, DB2, and CS) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity.
(9 VAC 5-40-80 and 9 VAC 5-80-110)
2. Visible emissions (excluding condensed water vapor/steam) from the Dry Waste Transfer System (EU ID# CTL) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity.
(9 VAC 5-40-80 and 9 VAC 5-80-110)
3. Visible emissions (excluding condensed water vapor/steam) from the Sander (EU ID# SDR) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity.
(9 VAC 5-40-80 and 9 VAC 5-80-110)
4. Visible emissions (excluding condensed water vapor/steam) from the Central Truck Loading Bin shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six minute period in any one hour, in which opacity shall not exceed 60 percent.
(9 VAC 5-40-80 and 9 VAC 5-80-110)

Existing Source Regulations (Rule 4-4):

5. Emissions from the operation of the debarkers (EU ID# DB1 and DB2) shall not exceed the limits specified below:

Particulate Matter 66.9 lbs/hr

PM-10 66.9 lbs/hr

(9 VAC 5-40-260 and 9 VAC 5-80-110)

6. Emissions from the operation of the Central Truck Loading Bin (EU ID #CTLB) shall not exceed the limits specified below (annual emissions are to be calculated monthly as the sum of the each consecutive 12-month period):

Particulate Matter 8.6 lbs/hr

PM-10 8.6 lbs/hr

(9 VAC 5-40-260 and 9 VAC 5-80-110)

Existing Source Regulations (Rule 4-17):

7. Emissions from the operation of the chip screen (EU ID# CS) shall not exceed the limits specified below:

Particulate Matter 0.05 gr/dscf

PM-10 0.05 gr/dscf

(9 VAC 5-40-2270 and 9 VAC 5-80-110)

8. Emissions from the operation of the Dry Waste Transfer System (EU ID #CTL) shall not exceed the limits specified below:

Particulate Matter 0.05 gr/dscf

PM-10 0.05 gr/dscf

(9 VAC 5-40-2270 and 9 VAC 5-80-110)

9. Emissions from the operation of the Sander (EU ID #SDR) shall not exceed the limits specified below:

Particulate Matter 0.05 gr/dscf

PM-10 0.05 gr/dscf

(9 VAC 5-40-2270 and 9 VAC 5-80-110)

B. Monitoring

Title V Conditions:

1. The debarkers and chip screen shall be observed visually at least once each calendar week to

determine if the emissions of each unit, excluding condensed water vapor/steam, are normal. Each unit observed having apparent abnormal visible emissions shall be followed up with a 40 CFR Appendix A Method 9 visible emissions evaluation unless the apparent abnormal condition is corrected as expeditiously as possible and recorded, and the apparent abnormal condition, its cause, and the corrective action measures taken are recorded. When conditions prevent taking opacity readings using 40 CFR 60 Appendix A, Method 9, the permittee shall note the cause(s), such as: inclement weather conditions, steam plume interference, plume intermingling, and sun angle exceedance, and shall perform the Method 9 evaluation as soon as conditions permit. (9 VAC 5-80-110 and 9 VAC 5-50-20)

2. The dry waste transfer system baghouse (PCD ID #BH2) shall be observed visually at least once each calendar week to determine if its emissions, excluding condensed water vapor/steam, are normal. Each unit observed having apparent abnormal visible emissions shall be followed up with a 40 CFR Appendix A, Method 9 visible emissions evaluation unless the apparent abnormal condition is corrected as expeditiously as possible and recorded, and the apparent abnormal condition, its cause, and the corrective action measures taken are recorded. When conditions prevent taking opacity readings using 40 CFR 60 Appendix A, Method 9, the permittee shall note the cause(s), such as: inclement weather conditions, steam plume interference, plume intermingling, and sun angle exceedance, and shall perform the Method 9 evaluation as soon as conditions permit. (9 VAC 5-80-110 and 9 VAC 5-50-20)
3. The sander baghouse (PCD ID #BH1) shall be observed visually at least once each calendar week to determine if its emissions, excluding condensed water vapor/steam, are normal. Each unit observed having apparent abnormal visible emissions shall be followed up with a 40 CFR Appendix A, Method 9 visible emissions evaluation unless the apparent abnormal condition is corrected as expeditiously as possible and recorded, and the apparent abnormal condition, its cause, and the corrective action measures taken are recorded. When conditions prevent taking opacity readings using 40 CFR 60 Appendix A, Method 9, the permittee shall note the cause(s), such as: inclement weather conditions, steam plume interference, plume intermingling, and sun angle exceedance, and shall perform the Method 9 evaluation as soon as conditions permit. (9 VAC 5-80-110 and 9 VAC 5-50-20)
4. The Central Truck Loading Bin (EU ID #CTLB) shall be observed visually at least once each calendar week to determine if its emissions, excluding condensed water vapor/steam, are normal. Each unit observed having apparent abnormal visible emissions shall be followed up with a 40 CFR Appendix A Method 9 visible emissions evaluation unless the apparent abnormal condition is corrected as expeditiously as possible and recorded, and the apparent abnormal condition, its cause, and the corrective action measures taken are recorded. When conditions prevent taking opacity readings using 40 CFR 60 Appendix A Method 9, the permittee shall note the cause(s), such as: inclement weather conditions, steam plume interference, plume intermingling, and sun angle exceedance, and shall perform the Method 9 evaluation as soon as conditions permit. (9 VAC 5-80-110 and 9 VAC 5-50-20)

C. Recordkeeping

Title V Condition:

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be

arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

- Monthly and annual particulate emission calculations for the debarkers and chip screen.
- Results of visible emissions observations, any subsequent Method 9 visible emission evaluations, the cause of any abnormal and excess visible emissions, corrective measures taken to correct the excess visible emissions, and records of conditions which prevent Method 9 visible emission evaluations in the event of an apparently abnormal visible emission condition.
- Results of any emissions testing.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years
(9 VAC 5-80-110)

D. Testing

The permit does not require source tests for the chip screen. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Title V Conditions:

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-40-30 and 9 VAC 5-80-110)

****Note:** *The following condition is from the Commonwealth of Virginia's Regulations for the Control and Abatement of Air Pollution.*

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

E. Reporting

Title V Condition:

1. The permittee shall report the results of any 40 CFR Part 60, Appendix A, Method 9 visible emissions evaluation performed in accordance with Conditions IV.B.1 through 4. If the test indicates that any emissions unit is out of compliance with the opacity standard, the source shall also report the length of time associated with any exceedance of the standard and the corrective action taken to correct the exceedance. This report shall be sent to the Director, Piedmont Regional Office.
(9 VAC 5-80-110 E)

F. Streamlined Requirements

The process weight rule (Rule 4-4: *Emission Standards for General Process Operations*) could be applicable to the chip screen, but would allow excessive emissions. The 0.05 gr/scf standard contained in the woodworking rule (Rule 4-17) is more stringent.

EMISSION UNIT APPLICABLE REQUIREMENTS – Veneer Dryers (EU ID# VD1-VD3); Veneer Conditioning Chamber (EU ID# VCC); Presses (EU ID# P1-P3); Moisture Sealant Surface Coating Line (EU ID# SC-1)

There are two sources of specific applicable requirements for the veneer dryers, presses, and moisture sealant surface coating line: The 9/08/06 minor NSR permit and MACT, Subpart DDDD.

There is one source of specific applicable requirements for the veneer conditions chamber: The 9/08/06 minor NSR permit.

A. Limitations

9/08/06 minor NSR permit and MACT, Subpart DDDD:

1. Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) emissions from the veneer dryers, heated zones (EU ID# VD1 - VD3) shall be controlled by a thermal catalytic oxidizer (RCO/RTO-1). The thermal catalytic oxidizer shall operate in one of two modes: thermal mode (high temperature) or catalytic mode (medium temperature). The thermal catalytic oxidizer shall achieve a destruction efficiency of at least 90 percent (for VOC and total HAP (measured as THC, as carbon)) on a mass basis in both control modes. The thermal catalytic oxidizer shall be provided with adequate access for inspection.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-60-95, 40 CFR 63.2240(b), and Condition 2 of 9/8/06 Permit)

****Note:** *The thermal catalytic oxidizer is currently referenced as TCO-1 in the 9/08/06 NSR permit. It has been changed in the Title V permit to RCO/RTO-1 by request from the facility. TCO-1 is a trademarked name by a specific manufacturer whereas RCO/RTO-1 refers to classes of control technology.*

2. Particulate emissions from the veneer dryers, heated zones (EU ID# VD1 - VD3) shall be controlled by a thermal catalytic oxidizer (RCO/RTO-1) with a control efficiency of at least 50 percent (for particulate matter) on a mass basis in both thermal and catalytic control modes. The thermal catalytic oxidizer shall be provided with adequate access for inspection.

(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 3 of 9/8/06 Permit)

3. The permittee shall minimize fugitive emissions from the veneer dryers by minimizing fugitive emissions from the dryer doors (through proper maintenance procedures) and the green end of the dryers (through proper balancing of the heated zone exhausts). The permittee must develop and follow a plan for this minimization.

(9 VAC 5-80-110, 40 CFR 63.2241(a), and 40 CFR 63.2265)

****Note:** *This condition was placed in the Title V permit since it is an applicable requirement in MACT, Subpart DDDD. DEQ thought that it was appropriate and helpful for the facility.*

4. The thermal catalytic oxidizer firebox temperature when operating in thermal control mode shall be maintained above the minimum 3-hour block average firebox temperature determined in the thermal control mode performance test required by Condition V.D.3 and 40 CFR 63.2262 and which maintains the minimum control efficiencies in Conditions V.A.1 and 2.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-60-95, 40 CFR 63.2240(b), and Condition 4 of 9/8/06 Permit)

5. The thermal catalytic oxidizer firebox temperature when operating in catalytic mode shall be maintained above the minimum 3-hour block average firebox temperature determined in the most recent catalytic control mode performance test, which maintains the minimum control efficiencies in Conditions V.A.1 and 2.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-60-95, 40 CFR 63.2240(b), and Condition 5 of 9/8/06 Permit)

****Note:** *The thermal catalytic oxidizer performance test in the catalytic mode was completed on 10/26/07 and 11/1/07; therefore, references to that initial test have been deleted.*

6. The routine control device maintenance exemption for the thermal catalytic oxidizer controlling veneer dryers emissions must not exceed 0.5 percent of annual operating uptime for each process unit controlled. The compliance options and operating requirements do not apply during times when control device maintenance covered under your approved routine control device maintenance exemption is performed. The permittee must minimize emissions to the greatest extent possible during these routine control device maintenance periods.
(9 VAC 5-80-110 and 40 CFR 63.2251)

****Note:** *This condition was placed in the Title V permit since the facility submitted a routine control device maintenance exemption for MACT, Subpart DDDD (and was approved). One stipulation of this exemption is that it be placed in the Title V permit, as stated in 40 CFR 63.2251.*

7. Volatile organic compound (VOC) emissions from the moisture sealant surface coating line (EU ID# SC-1) shall be controlled by the use of waterborne coatings. The VOC content of the waterborne coatings shall not exceed 0.03 lb/gal (as applied).
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 8 of 9/8/06 Permit)
8. Only non-HAP coatings shall be used in the moisture sealant surface coating line (EU ID# SC-1). Records shall be kept showing that only non-HAP coatings are being used.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-60-95, 40 CFR 63.2241(a), and Condition 9 of 9/8/06 Permit)
9. The approved fuels for the thermal catalytic oxidizer are natural gas and propane. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-60-95, and Condition 15 of 9/8/06 Permit)
10. The veneer dryers (EU ID# VD1 - VD3) shall process no more than 375.0 million sq ft/yr (3/8" basis), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 12 of 9/8/06 Permit)
11. The veneer conditioning chamber (EU ID# VCC) shall process no more than 23.2 million sq ft/yr (3/8" basis), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 11 of 9/8/06 Permit)
12. The presses (EU ID# P1 - P3) shall process no more than 395.0 million sq ft/yr (3/8" basis),

calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 13 of 9/8/06 Permit)

13. The throughput of coatings to the moisture sealant surface coating line (EU ID# SC-1) shall not exceed 600,000 gallons per year, calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 14 of 9/8/06 Permit)

14. Visible emissions from the thermal catalytic oxidizer, excluding condensed water vapor or steam, shall not exceed 10 percent as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80, 9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 22 of 9/8/06 Permit)

15. Visible emissions from the veneer conditioning chamber (EU ID# VCC), cooling zone stacks (VDC-1 - VDC-3) and presses (EU ID# P1 - P3), excluding condensed water vapor or steam, shall not exceed 20 percent as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80, 9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 21 of 9/8/06 Permit)

16. Emissions from the operation of the veneer dryers (exhausted through the thermal catalytic oxidizer stack) shall not exceed the limits specified below:

Particulate Matter	10.7 lbs/hr	38.5 tons/yr
PM-10	10.7 lbs/hr	38.5 tons/yr
Nitrogen Oxides (as NO ₂)	2.5 lbs/hr	11.1 tons/yr
Carbon Monoxide	18.9 lbs/hr	80.9 tons/yr
Volatile Organic Compounds	4.5 lbs/hr	16.3 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180, and Condition 17 of 9/8/06 Permit)

17. Emissions from the operation of the veneer dryers cooling sections (VDC-1 - VDC-3) shall not exceed the limits specified below:

Carbon Monoxide	2.2 lbs/hr	8.1 tons/yr
Volatile Organic Compounds	2.6 lbs/hr	9.4 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180, and Condition 18 of 9/8/06 Permit)

18. Emissions from the operation of the veneer conditions chamber (EU ID# VCC) shall not exceed the limits specified below:

Volatile Organic Compounds 0.6 lbs/hr 2.7 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180, and Condition 16 of 9/8/06 Permit)

19. Emissions from the operation of the presses (EU ID# P1 - P3) shall not exceed the limits specified below:

Particulate Matter 1.5 lbs/hr 4.8 tons/yr

PM-10 1.5 lbs/hr 4.8 tons/yr

Volatile Organic Compounds 9.3 lbs/hr 29.6 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180, and Condition 19 of 9/8/06 Permit)

20. Emissions from the operation of the moisture sealant surface coating line (EU ID# SC-1) shall not exceed the limits specified below:

Volatile Organic Compounds 5.4 lbs/hr 9.0 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180, and Condition 20 of 9/8/06 Permit)

21. The veneer dryers (EU ID# VD1 - VD3), presses (EU ID# P1 - P3), and moisture sealant surface coating line (EU ID# SC-1) shall be operated in accordance with 40 CFR 63 Subparts A and DDDD.
(9 VAC 5-80-110, 40 CFR 63 Subparts A and DDDD, and Condition 23 of 9/8/06 Permit)

****Note:** *This condition was placed in the Title V permit for ease and understanding of what is subject to MACT, Subpart DDDD.*

B. Monitoring

9/08/06 minor NSR permit and MACT, Subpart DDDD:

1. The thermal catalytic oxidizer shall be equipped with devices to continuously measure the firebox temperature. The devices shall be installed, calibrated, maintained and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The devices must meet the requirements in 40 CFR 63.2269(b)(1) through (6). Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the veneer dryers are operating.
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-20 C, 9 VAC 5-50-260, 40 CFR 63.2269(b), and Condition 6 of 9/8/06 Permit)

****Note:** *The reference to meet the requirements in 40 CFR 63.2269(b)(1) through (6) was added to this condition to be more specific and clear for DEQ and the facility.*

Title V Conditions:

2. The exhaust from the thermal catalytic oxidizer shall be observed visually at least once each calendar week to determine if its emissions, excluding condensed water vapor/steam, are normal.

Each unit observed having apparent abnormal visible emissions shall be followed up with a 40 CFR Appendix A Method 9 visible emissions evaluation unless the apparent abnormal condition is corrected as expeditiously as possible and recorded, and the apparent abnormal condition, its cause, and the corrective action measures taken are recorded. When conditions prevent taking opacity readings using 40 CFR 60 Appendix A Method 9, the permittee shall note the cause(s), such as: inclement weather conditions, steam plume interference, plume intermingling, and sun angle exceedance, and shall perform the Method 9 evaluation as soon as conditions permit. (9 VAC 5-40-20, 9 VAC 5-50-20)

3. The exhaust from the veneer conditioning chamber (EU ID# VCC) shall be observed visually at least once each calendar week to determine if its emissions, excluding condensed water vapor/steam, are normal. Each unit observed having apparent abnormal visible emissions shall be followed up with a 40 CFR Appendix A Method 9 visible emissions evaluation unless the apparent abnormal condition is corrected as expeditiously as possible and recorded, and the apparent abnormal condition, its cause, and the corrective action measures taken are recorded. When conditions prevent taking opacity readings using 40 CFR 60 Appendix A Method 9, the permittee shall note the cause(s), such as: inclement weather conditions, steam plume interference, plume intermingling, and sun angle exceedance, and shall perform the Method 9 evaluation as soon as conditions permit. (9 VAC 5-40-20, 9 VAC 5-50-20)
4. The plywood presses (EU ID #P1-P3) shall be observed visually at least once each calendar week to determine if its emissions, excluding condensed water vapor/steam, are normal. Each unit observed having apparent abnormal visible emissions shall be followed up with a 40 CFR Appendix A Method 9 visible emissions evaluation unless the apparent abnormal condition is corrected as expeditiously as possible and recorded, and the apparent abnormal condition, its cause, and the corrective action measures taken are recorded. When conditions prevent taking opacity readings using 40 CFR 60 Appendix A Method 9, the permittee shall note the cause(s), such as: inclement weather conditions, steam plume interference, plume intermingling, and sun angle exceedance, and shall perform the Method 9 evaluation as soon as conditions permit. (9 VAC 5-40-20, 9 VAC 5-50-20)

CAM Requirements

A Compliance Assurance Monitoring (CAM) Plan for VOC was included in the application for the facility according to 40 CFR 64.2. This was due to the fact that the veneer dryers are controlled by a thermal catalytic oxidizer as a means to control VOC emissions, are subject to an emission limitation, and have uncontrolled PM emissions that are above major source thresholds. The permittee shall monitor, operate, calibrate and maintain the thermal catalytic oxidizer controlling the veneer dryers according to the following:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
<ul style="list-style-type: none"> Continuously monitor the firebox temperature when in each mode (catalytic and thermal) Records shall be collected by a Data Acquisition System (DAS). 	<ul style="list-style-type: none"> Multiple temperature probes shall be utilized to ensure accurate readings. Temperature probes shall be replaced as necessary. 	<ul style="list-style-type: none"> Thermal mode and catalytic mode: The minimum firebox temperature for each mode shall be based on the 3-hour block average combustion chamber temperature at which the unit was operating during

		<p>the most recent compliance test.</p> <ul style="list-style-type: none">• Excursion: A 3-hour block average value below the minimum firebox temperature.• Data points shall be collected every 15 minutes, averaged over a 3-hour block period.
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All boilerplate CAM conditions were placed in the Title V permit (the same ones as listed for the wood-fired boiler above).

C. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region Regional Office. These records shall include, but are not limited to:
 - Annual throughput of veneer (in square feet, 3/8" basis) to the veneer conditioning chamber (VCC), the dryers (VD1, VD2, and VD3) and presses (1, 2, & 3), calculated monthly as the sum of each consecutive 12-month period.
 - Records of thermal catalytic oxidizer firebox temperatures in both thermal and catalytic control modes to demonstrate compliance with the emission limits contained in Condition V.A.16.
 - Yearly catalyst activity tests and records if any necessary corrective action was taken to ensure that the catalyst is performing within its design range.
 - Monthly and annual throughput of coatings through the moisture sealant surface coating line (EU ID# SC-1). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
 - Material Safety Data Sheets (MSDS) or other vendor information showing VOC and HAP content for each coating used on the moisture sealant surface coating line (EU ID# SC-1).
 - Copies of each notification and report that have been submitted to comply with MACT, Subpart DDDD.
 - Records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
 - Documentation that the facility is following their plan for minimizing fugitive emissions.
 - Records of current equipment throughput capacity and emission factors for the plywood presses, to demonstrate compliance with Condition V.A.15.
 - Results of visible emissions observations, any subsequent Method 9 visible emission evaluations, the cause of any abnormal and excess visible emissions, corrective measures taken to correct the excess visible emissions, and records of conditions which prevent Method

9 visible emission evaluations in the event of an apparently abnormal visible emission condition.

- Scheduled and unscheduled maintenance and operator training.
- Performance test records and results.
These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years
(9 VAC 5-50-50, 9 VAC 5-80-110, 40 CFR 63.2282, and Condition 28 of 9/8/06 Permit)

****Note:** The recordkeeping that corresponds with 40 CFR 63, Subpart DDDD was added to this condition to be more specific and clear for DEQ and the facility.

**** Note (from original Title V):** (Item i) The permittee questioned the frequency with which these records would be maintained. The permit was changed to add the word "current," which means current throughput capacity. This information should change infrequently, or possibly not at all. Emission factors are periodically updated, and the permittee should update the recorded emission factors as new information is received.

2. The permittee shall maintain a written startup, shutdown, and malfunction (SSM) plan as stated in §63.6(e) that describes, in detail, procedures for operating and maintaining the affected sources shown below during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control and monitoring equipment used to comply with the relevant standards limited by this permit:

Emission Unit ID	Equipment
VD1 - VD3	Veneer Dryers
P1 - P3	Presses
SC-1	Moisture sealant surface coating line

(9 VAC 5-80-110, 40 CFR 63.6(e), and 40 CFR 63.2250(c))

****Note:** Some additional recordkeeping was added into the Title V from MACT, Subpart DDDD to be more specific and clear for DEQ and the facility.

D. Testing

The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

9/08/06 minor NSR permit and MACT, Subpart DDDD:

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30, 9 VAC 5-80-110, and Condition 10 of 9/8/06 Permit)
2. Periodic activity tests shall be conducted on the thermal catalytic oxidizer catalyst to determine the ongoing activity level in terms of percent reduction of VOC. The periodic activity test requirement shall remain in effect so long as the oxidizer is operated as a catalytic unit. Unless otherwise

approved in writing by the DEQ, the interval for these periodic activity tests shall not exceed 12 months of thermal catalytic oxidizer operation, calculated from the month following the most recent valid periodic activity test.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 40 CFR 63.2240(b), and Condition 7 of 9/8/06 Permit)

3. Initial performance tests shall be conducted on the thermal catalytic oxidizer stack (TCO-1) while operating in thermal mode for VOC, HAPs, particulate matter, CO, and NO_x to determine compliance with Conditions V.A.1, 2, and 16. Concurrently, initial performance tests shall be conducted for VOC and particulate matter at the inlet to the thermal catalytic oxidizer to determine compliance with Conditions V.A.1 and 2. The initial performance tests shall be performed and demonstrate compliance within 90 days of beginning thermal mode operation of the thermal catalytic oxidizer. Stack tests for new or modified sources shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and 9 VAC 5-60-30 of State Regulations and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 and 9 VAC 5-60-70. Compliance tests shall be reported to the Director, Piedmont Regional Office in writing within 45 days of test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-110, 9 VAC 5-50-30 and 9 VAC 5-60-30, and Condition 25 of 9/8/06 Permit)

4. During initial performance testing for thermal catalytic oxidizer as required by Condition V.D.3, a baseline temperature shall be established and recorded to ensure destruction efficiency listed in Conditions V.A.1 and 2. Baseline temperatures shall be established for the thermal catalytic oxidizer when operating both in catalytic mode and thermal mode. Records shall be kept on file for the life of the thermal catalytic oxidizer.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 26 of 9/8/06 Permit)

5. Concurrent with the Performance Test required by Condition V.D.3, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted on the thermal catalytic oxidizer stack. The test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the test are to be arranged with the Piedmont Regional Office and shall be capable of demonstrating compliance. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed within 60 days after achieving the maximum production rate at which the facility will be operated. Should conditions prevent concurrent opacity observations, the Piedmont Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. Two copies of the test result shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-110, 9 VAC 5-50-30 and 9 VAC 5-80-1200, and Condition 27 of 9/8/06 Permit)

****Note:** These initial performance tests are included in the Title V since they have not been completed yet. Once completed, these may be taken out. As stated above, the thermal catalytic oxidizer performance test in the catalytic mode was completed on 10/26/07 and 11/1/07; therefore, references to that initial test have been deleted.

Title V Condition:

6. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.

(9 VAC 5-80-110)

E. Reporting

The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

MACT, Subpart DDDD:

1. The permittee shall submit semi-annual compliance reports to the Piedmont Regional Office within 30 days after the end of each calendar 6 month period as specified in 40 CFR 63.2281.
(9 VAC 5-80-110 F and 40 CFR 63.2281)

Title V Condition:

2. The permittee shall report the results of any 40 CFR Part 60, Appendix A Method 9 visible emissions evaluation performed in accordance with Conditions V.B.2, 3, and 4. If the test indicates that any emissions unit is out of compliance with the opacity standard, the source shall also report the length of time associated with any exceedance of the standard and the corrective action taken to correct the exceedance. This report shall be sent to the Director, Piedmont Regional Office.
(9 VAC 5-80-110 E)

F. Streamlined Requirements

None.

EMISSION UNIT APPLICABLE REQUIREMENTS – Facility Wide Conditions

A. Limitations

Title V Conditions:

1. In order to minimize the duration and frequency of excess emissions, including visible emissions, due to malfunctions of process equipment or air pollution control equipment, the permittee shall:
 - Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance. These records shall be maintained on site for a period of five (5) years and shall be made available to the DEQ upon request.
 - Maintain an inventory of spare parts that are needed to minimize duration of air pollution control equipment breakdowns.
(9 VAC 5-50-20 and 9 VAC 5-80-110)
2. The permittee shall have available written operating procedures for the related air pollution control equipment. Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures. These procedures shall be based on the manufacturer's recommendations, at minimum. The permittee shall maintain records of training provided, including names of trainees, date of training, and nature of training.
(9 VAC 5-50-20 and 9 VAC 5-80-110)
3. Existing Source Standard for Visible Emissions – Except where otherwise specified in this permit, the permittee shall not cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section.
(9 VAC 5-50-80 and 9 VAC 5-80-110)
4. Start-up, Shutdown, and Malfunction – At all times, including periods of startup, shutdown and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20 and 9 VAC 5-80-110)

A. Monitoring and Recordkeeping

Title V Conditions:

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrated compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

- Maintenance and operator training records for air pollution control equipment.
- Opacity records.
- Emissions data, including emission factors and throughput data.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years
(9 VAC 5-50-50 and 9 VAC 5-80-110)

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 2-2003".

This general condition cite(s) the Article(s) that follow(s):

Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources

This general condition cites the sections that follow:

9 VAC 5-80-80. Application

9 VAC 5-80-140. Permit Shield

9 VAC 5-80-150. Action on Permit Applications

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

This general condition contains a citation from the Code of Federal Regulations as follows:
40 CFR 60.13 (h). Monitoring Requirements.

J. Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources

9 VAC 5-80-190. Changes to Permits.

9 VAC 5-80-260. Enforcement.

9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources

9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas

9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

This general condition cites the regulatory sections that follow:

9 VAC 5-60-70. Designated Emissions Standards

9 VAC 5-80-110. Permit Content

STATE ONLY APPLICABLE REQUIREMENTS

No state only applicable requirements apply to this facility.

FUTURE APPLICABLE REQUIREMENTS

No Future Applicable Requirements have been identified for this facility.

INAPPLICABLE REQUIREMENTS

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	This Subpart does not apply to the wood-fired boiler (EU ID# WWB) since the construction of this unit commenced before June 19, 1984, and has not been "modified" according to the NSPS definition.

COMPLIANCE PLAN

Not applicable.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
FCS	First-Cut Saw	9 VAC 5-80-720 B	PM/PM-10	--
CUS	Cut-Up Saws	9 VAC 5-80-720 B	PM/PM-10	--
CS-C1, CS-C2	Chip Screen Relay Cyclones	9 VAC 5-80-720 B	PM/PM-10	--
CV-1 through CV-10	Conveyors	9 VAC 5-80-720 B	PM/PM-10	--
VD2, VD3 (C4)	Vacuum Exhaust Cyclone	9 VAC 5-80-720 B	PM/PM-10	--
GL1, GL2	Glue Lines No. 1 & 2	9 VAC 5-80-720 B	VOC	--
T #'s	Tanks	9 VAC 5-80-720	VOC	varies
FH	Fuel House Bark Unloading	9 VAC 5-80-720 B	PM/PM-10	--
CTB	Chip Truck Bin	9 VAC 5-80-720 B	PM/PM-10	--
UPRD	Unpaved Roads	9 VAC 5-80-720 B	PM/PM-10	--
PM	Plywood Mill Fugitive Emissions	9 VAC 5-80-720 B	PM/PM-10 VOC	--

The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in the *Independent Messenger* from June 11, 2008 to July 11, 2008 and the EPA review was from June 6, 2008 to July 20, 2008. No comments were received from either reviews.